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Public Conceptions of Mental Illness in 1950 and 1996: What is Mental Illness and Is It to be Feared?*

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In the 1950s, the public defined mental illness in much narrower and more extreme terms than did psychiatry, and fearful and rejecting attitudes toward people with mental illnesses were common. Several indicators suggest that definitions of mental illness may have broadened and that rejection and negative stereotypes may have decreased since that time. However, lack of comparable data over time prevents us from drawing firm conclusions on these questions. To address this problem, the Mental Health Module of the 1996 General Social Survey repeated a question regarding the meaning of mental illness that was first asked of a nationally representative sample in 1950. A comparison of 1950 and 1996 results shows that conceptions of mental illness have broadened somewhat over this time period to include a greater proportion of non-psychotic disorders, but that perceptions that mentally ill people are violent or frightening substantially increased, rather than decreased. This increase was limited to respondents who viewed mental illness in terms of psychosis. Among such respondents, the proportion who described a mentally ill person as being violent increased by nearly 2 1/2 times between 1950 and 1996. We discuss the possibility that there has been a real move toward acceptance of many forms of mental illness as something that can happen to one of "us," but that people with psychosis remain a "them" who are more feared than they were half a century ago.

In the 1950s, social scientists began to address questions concerning how the lay public understood mental illness and how they reacted to people who suffered from such illnesses. What they learned was not heartening. Early studies found that, not only was the public's orientation to mental illness largely uninformed by the current psychiatric thinking of

*We wish to acknowledge the contribution of Dr. Shirley Star, whose thoughtful, painstaking and original analysis of public conceptions of mental illness inspired the present paper. We thank Patrick Bova of the National Opinion Research Center, who facilitated our access to Star's original data, coding materials, and unpublished manuscripts, and we thank the anonymous reviewers of two versions of this manuscript, who provided many helpful insights. The Mental Health Module of the 1996 General Social Survey was funded by the MacArthur Foundation. Partial support for Dr. Link was provided by a Senior Investigator Award from the National Alliance for Research on Schizophrenia and Major Depression. Address correspondence to: Jo C. Phelan, Division of Sociomedical Sciences, Joseph L. Mailman School of Public Health, Columbia University, 600 W. 168th Street, New York, NY 10032.

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the day, but public conceptions were suffused with negative stereotypes, fear, and rejection. Regarding public conceptualizations of mental illness, Star (1952, 1955), based on interviews with over 3,000 Americans, concluded that there was a strong tendency for people to equate mental illness with psychosis and to view other kinds of emotional, behavioral, or personality problems in non-mental health terms—as, "an emotional or character difference of a non-problematic sort" (Star 1952:7). According to some authors, it was because mental illness was defined in such narrow and extreme terms that the public feared, rejected, and devalued people with mental illnesses (Star 1952; Crocetti, Spiro, and Siassi 1974; Gove 1982). Regardless of the source of these negative attitudes, their presence was well documented. Nunnally (1961), for example, found that people were more likely to apply a broad range of negative adjectives such as "dangerous," "dirty," "cold," "worthless," "bad," "weak," and "ignorant" to a person labeled as "insane" or "neurotic" than to an "average" person (p. 46). Similarly, Star (1952, 1955) found that many Americans, in using their own words to describe their understanding of the term "mental illness," included characteristics such as dangerousness and unpredictability. Cumming and Cumming (1957), studying two communities in Saskatchewan, found that most people preferred to avoid close personal contact with someone who had been mentally ill and that the researchers' efforts to change those attitudes were met with anxiety and hostility. Not surprisingly, Yarrow, Clausen, and Robbins (1955) found that fear of stigma was a serious concern for wives of psychiatric patients.

The public's negative orientations toward mental illness also extended to the professionals who treated it. Nunnally (1961) found that the public evaluated professionals who treat mental disorders significantly more negatively than those who treat physical disorders. Star (1957) found that the idea of consulting psychiatrists enjoyed little public endorsement, with few people knowing anyone who had consulted a psychiatrist or who they thought might be helped by a psychiatrist. As one respondent bluntly put it: "I don't think I'd have to go to anybody to tell me I was crazy, hold my hand and talk to me for twenty dollars an hour . . . If they didn't have any more sense than to go to a psychiatrist they ought to be put in a nut house" (Star 1957:3).

These findings were discouraging to mental health professionals and researchers for several reasons. They implied that public education efforts regarding mental illness had produced little effect. They implied that persons identified as mentally ill might suffer extreme rejection and stigmatization. And they implied that many people would fail to seek mental health treatment that might benefit them.

As we enter the new millennium, however, there are reasons to believe that orientations toward mental illness may have changed—perhaps dramatically—since these early studies were conducted. The clearest change is that many more people now seek mental health treatment. Whether measured in terms of population surveys of self-reported help-seeking (Veroff, Kulka and Douvan 1981; Regier et al. 1993; Kessler and Zhao 1999) or in terms of facility-based records of service utilization (Manderscheid and Henderson 1998), the data suggest that the rate of utilization of professional mental health services has at least doubled, and maybe tripled, between the 1950s and today. These trends indirectly suggest that the public has come to think differently about mental illness—that they now define a broader array of problems in mental health terms and that there is less stigma attached to these problems and their treatment. It is difficult to imagine such dramatic increases in utilization in the absence of such changes.

There is also more direct evidence for changes in public beliefs and attitudes. Regarding lay definitions of mental illness, several studies employing the "Star vignettes" (Star 1955) in which a respondent is presented with a description of a person meeting criteria for a particular psychiatric disorder and is asked how likely it is that the person has a "mental illness" have shown a fairly clear trend toward increased identification of the vignettes as instances of mental illness (Cumming and Cumming 1957; Dohrenwend, Bernard, and Kolb 1962; Crocetti and Lemkau 1963; Meyer 1964; Dohrenwend and Chin-Shong 1967; Bentz, Edgerton, and Kherlopian 1969; Brockman and D'arcy 1978; Link et al. 1999). Veroff et al. (1981) found an increase between 1957 and 1976 not only in reports of actual help-seeking but also in hypothetical "readiness for self-referral," suggesting that increased utilization reflects, at least in part,

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both a greater tendency to view emotional or behavioral problems as something that a mental health professional might be able to help with and a greater willingness to seek such help. These authors also found—and interpreted as evidence for reduced stigma—an increasing congruence between respondents' endorsement of mental health treatment for someone else facing an unmanageable crisis and their willingness to seek such help themselves. Voluntary disclosures of mental health problems by public figures (e.g., journalist Mike Wallace and author William Styron) in recent years also suggest a diminishing fear of stigma. Finally, some researchers have concluded from reviews of studies conducted in the 1950s and 1960s that both social distance and negative stereotypes regarding people with mental illnesses abated over that time period (Gove 1982; Crocetti et al. 1974). Gove (1982) states, for example:

> the evidence of the 1950s would indicate that . . . the public was ignorant about mental illness, had a very negative image of persons identified as mentally ill, and excluded them. Since then there has been a massive education effort focused on mental illness: furthermore, the generally transitory nature of mental illness and effectiveness of treatment has become fairly visible [with the result that] in the vast majority of cases the stigma [experienced by mental patients] appears to be transitory and does not appear to pose a severe problem. (P. 290).

Thus, there are indications that substantial changes in public orientations to mental illness may have taken place since the 1950s. But the evidence is not firm. While the increase in service utilization is unquestionable, the extent to which changes in conceptions and attitudes account for this increase is not clear. The conclusions that can be drawn from more direct empirical evidence on beliefs and attitudes are limited by incomparability of the studies conducted at different time points. These studies have varied in the populations they have sampled and—particularly for the issue of stigma—in the questions they have asked of study subjects (Belson 1957; Bentz et al. 1969; Bentz, Edgerton, and Miller 1969; Blizzard 1970; Brockman and D'arcy 1978; Crocetti and Lemkau 1963; Crocetti et al. 1974; Cumming and Cumming 1957; Dohrenwend 1966; Dohrenwend and Chin-Shong 1967; Dohrenwend et al. 1962; Edgerton and Bentz 1969; Elinson, Padilla, and Perkins 1967; Lemkau and Crocetti 1961; Link et al. 1999; MacLean 1969; Meyer 1964; Olmsted and Durham 1976; Phillips 1964; Purdue University 1959; Rootman and Lafare 1965; Star 1952, 1955).

The Mental Health Module of the 1996 General Social Survey (GSS) presented the opportunity to address this limitation by collecting data on conceptions of mental illness that would be directly comparable to those gathered in earlier research. By repeating questions from an earlier study that used a similar methodology and sampling frame, it would be possible to make direct comparisons of beliefs and attitudes over time. Star's (1952, 1955) open-ended question asking respondents to define the concept of mental illness was chosen as the one best suited for this purpose. Not only did Star's study use face-to-face interviews with a nationally representative sample, like the GSS, but it was also conducted by the same organization: the National Opinion Research Center (NORC). A random sample of Star's original interview schedules is archived at NORC, allowing the 1950 and 1996 responses to be coded in a consistent manner. Diagnostic categories and criteria have changed significantly since the 1950s (American Psychiatric Association 1952; 1994). This would cause problems of comparability over time if conceptions of mental illness were assessed by presenting a set of symptoms or behaviors that match current diagnostic groupings and eliciting respondents' reactions, as is the case with the more widely used "Star vignettes." Because our open-ended question elicits definitions of mental illness from the respondent rather than presenting them to him or her, changes in psychiatric nomenclature were not problematic.[1]

Stigma has typically been measured in terms of social distance (Owen, Eisner and McFaul 1981) or of negative images and stereotypes (Star 1952; Nunnally 1961; Olmsted and Durham 1976). Our question asks about respondents' conceptions of mental illness and is not well suited to assess social distance. However, negative images and stereotypes are an integral part of individuals' definitions of mental illness, and we use these negative images as an indicator of stigma. Specifically, we look at mentions of violence and other potentially frightening characteristics such as instability and unpredictability. While social distance is not measured directly,

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perceptions of dangerousness have been shown to be an important factor underlying the desire for social distance from people with mental illness (Link et al. 1987; Link et al. 1999).

In this paper, we assess whether apparent changes in public orientations toward mental illness are reflected in people's self-stated descriptions of mental illness. Specifically, we assess whether definitions have broadened to include a greater proportion of less serious (i.e., non-psychotic) disorders[2] and whether there has been a lessening of fearful imagery surrounding mental illness. We also assess the association between these two variables, testing the notion (Star 1952; Crocetti et al. 1974; Gove 1982) that fear and negative attitudes are tied to psychosis and that attitudes toward mentally ill people improve when public definitions of mental illness broaden to include a more diverse set of problems. By this thinking, if definitions broaden over time, fearful imagery should also decline. If this proves to be the case, a further question can be asked: Are positive changes in attitudes limited to persons with non-psychotic disorders, or does greater tolerance for a broader overall concept of mental illness feed back to soften negative attitudes toward people with psychosis as well? That is, does the inclusion of less serious disorders change the whole gestalt of "mental illness," rendering it more acceptable and less frightening, or does this broadening create two subgroups that elicit distinct reactions?

Finally, if there has been movement toward more broadly inclusive and less stereotyped conceptions of mental illness, one possible explanation is the sociodemographic transformation of the U.S. population over the last half of the twentieth century. Socioeconomic status, urban residence, and race/ethnicity have all been shown to be associated with conceptions of mental illness, attitudes toward people with mental illness and general tolerance (Abrahamson and Carter 1986; Phelan et al. 1995; Kiecolt 1988; Cumming and Cumming 1957; Dohrenwend and Chin-Shong 1967; Freeman 1961; Parra 1985; Star 1952, 1955; Westbrook, Lege, and Pennay 1993), and the distribution of each of these variables has changed markedly since 1950. We therefore test the hypothesis that changes in conceptions of and attitudes toward mental illness are in part mediated by increased socioeconomic status—particularly education—and by increased urbanicity.

METHODS

Sample and Procedure

The Star survey. Star used a modified area-probability sample of U.S. residents. We have located little written documentation of the sampling method. However, Jacob Feldman, a sampling statistician at NORC at the time, recalls that the sample entailed multi-stage random selection down through the block level and quota sampling of respondents within the randomly selected blocks.[3] Face-to-face interviews of approximately 1 1/2 hours were conducted with 3,529 adults (age 21 or older) by NORC in May and June of 1950. Most of the original interview schedules were eventually discarded, but a randomly selected one-tenth of them remain archived at NORC, resulting in a sample of 352 for the current study. Excluding non-responses and non-codable responses resulted in a sample of 337 for analysis of syndrome/problem categories and a sample of 335 for analysis of symptoms/manifestations (see below).

The GSS. The 1996 General Social Survey, conducted by NORC (Davis and Smith 1996), used a full probability sample of English-speaking persons 18 years of age or over[4] living in non-institutional arrangements within the United States. The response rate was 76.1 percent. Interviews of approximately 1 1/2 hours were conducted face-to-face between March and May of 1996. The question we analyze was asked of a random sub-sample of 710 respondents. Excluding non-responses and non-codable responses results in a sample of 653 for analysis of syndromes/problem categories and a sample of 622 for analysis of symptoms/ manifestations (see below).[5]

Dependent Variables

The dependent measures are derived from answers to the following open-ended question, asked in 1950 and 1996: "Of course, everyone hears a good deal about physical illness and disease, but now, what about the ones we call mental or nervous illness . . . When you hear someone say that a person is 'mentally-ill,' what does that mean to you?" If respondents' answers were unclear or incomplete, the following prompts were used: (1) "How would you describe a person who is mentally-ill?" (2)

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"What do you think a mentally-ill person is like?" (3) "What does a person like this *do* that tells you he is mentally-ill?" (4) "How does a person like this act?" Because we were concerned that social change might affect not only public responses but the coding process as well, all open-ended questions from the Star and GSS surveys were coded by the same individuals using the same procedures. Star's codebook is archived at NORC, and we used her coding categories and definitions to code responses to both surveys. To address our questions regarding conceptions of mental illness and stigma, two variables were coded: (1) specific symptoms and manifestations of mental illness as described by respondents, and (2) broader syndromes or problem categories into which the symptoms and manifestations can be grouped.

Symptoms/manifestations. These are specific forms of behavior or experience the respondent mentions as being indicative of mental illness. In all, there are 97 symptom/manifestations codes. Up to three symptoms were coded for each respondent. In the present analysis, we report on the following symptoms/manifestations: *extreme/excessive*, *unstable*, *unpredictable*, *uncontrolled*, *irrational,* and *violent.* Violence included mentions of violent sex crimes, homicidal tendencies or impulses, suicidal tendencies, violence against property, and unspecified forms of violence.

Syndromes/problem categories. These are more general categories of syndromes or types of problems that respondents associate with mental illness. If a respondent described behavior consistent with more than one category, up to three categories were coded. The categories and coding criteria are as follows.

Psychosis was coded when the respondent mentioned symptoms indicating breaks with reality (e.g., "person not completely in reality," "lives in his own world," "imaginary friends"). Mentions of bizarre behavior (e.g., "wanders off for days, comes back partially dressed") characteristic of psychosis and use of colloquial terms such as "nuts," "deranged," "crazy," or "out of his mind" were also coded as psychosis. In addition, psychosis was subtyped as *violent* if the respondent also mentioned one or more of the violent behaviors or tendencies indicated under violent symptoms/manifestations.

Anxiety/mood problems combines Star's original codes of neurasthenic neurosis, other neurosis, and acute nerve storms or tensions. This category was coded if a respondent mentioned anxiety or depressive symptoms (e.g., "appear worried or anxious all the time," "depressed"), extreme or labile emotions (e.g., "emotional ups and downs," "angry"), social withdrawal (e.g., "stay to themselves"), compulsive behavior, inability to function or take care of oneself (e.g., "can't cope with reality and function"), physical malaise or collapse, or if respondents referred to an "emotional problem."

Social deviance was coded when respondents made non-specific references to abnormal or strange behavior (e.g., "not normal behavior," "difficulty fitting in with society," "strange"). Also included are more specific mentions of deviant behavior (e.g., "urinates in public"), mentions of abnormal appearance (e.g., "look derelict—clothes in rags"), substance problems, sexual deviations, and criminal or delinquent behavior.

Mental deficiency/cognitive impairment refers to problems with thinking and reasoning (e.g., "slow in thinking," "cannot reason," "can't handle money"), as well as cognitively based difficulties with coping and functioning (e.g., "could not make good decisions for himself," "one who is not able to do for himself," "does not have the capacity to function normally in everyday life").

Other non-psychotic problems includes a wide range of problems and syndromes that included no references to psychosis but were not clear enough to classify further (e.g., "unbalanced in his thinking—one decision for him is about as important as another," "chemical imbalance," "borderline nervous breakdown," "life is getting away from them," "reactions disproportionate," "mental or brain disorder," "psychological problem").

Two of these categories *(psychosis* and *mood/anxiety problems*) correspond quite closely to broad psychiatric diagnostic groupings, as defined by the Diagnostic and Statistical Manual of Mental Disorders (American Psychiatric Association 1994). The other three categories correspond less directly with DSM-defined mental disorders. *Mental deficiency/cognitive impairment* includes both clear-cut indications of mental retardation and other manifestations (e.g., difficulty making decisions) that may not indicate mental retardation. *Social deviance* includes manifestations of antisocial personality disorder and

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substance-related disorders but is a broader category that also includes descriptions of "abnormal" or "strange" behavior that do not obviously correspond to any psychiatric category. Similarly, *other non-psychotic* is a heterogeneous category that does not correspond clearly with any particular psychiatric diagnosis.

Coding of dependent variables. Each verbatim response was coded independently by two of three persons trained to code all the open-ended material from the Mental Health Module. The coders had clinical training and master's degrees in psychology. Coders' questions were discussed with the first author. Reliability was assessed using Cohen's (1960) kappa, a measure of agreement corrected for chance expected agreement. Kappa values are 0 when raters agree no more than would be expected by chance and 1 when agreement is perfect. In this study, kappas were computed for agreement between the two raters as to the presence or absence of the four ratings most relevant to our central questions: Kappa was .96 for psychosis, .93 for violent psychosis, .95 for dangerousness, and .89 for frightening symptoms excluding violence (i.e., extreme/excessive, unstable, unpredictable, uncontrolled, irrational), indicating excellent reliability.

Independent variables

The primary independent variable is *year of interview* (1950 or 1996). We also measure several sociodemographic variables that we hypothesized might mediate changes in conceptions and attitudes over time.

Education, in the Star survey, was measured in terms of seven categories, ranging from no formal schooling to completion of college. In the GSS, it was measured in terms of five categories, ranging from less than high school to graduate education. We used these categories for analyses restricted to one time point. For analyses involving both time points, we created a third education variable: (1) less than high school; (2) high school; (3) some college; and (4) college degree.

Family income, in the Star survey, was measured in terms of nine categories, ranging from under $500 to $10,000 and over. In the GSS, it was measured in terms of 21 categories, ranging from under $1,000 to $75,000 or over. For both surveys, we used the midpoints of the categories. The lowest and highest categories were coded, respectively, $3,750 and $13,330 (Star) and $750 and $100,000 (GSS). For analyses involving both time points, we created a variable in which Star values were unchanged but GSS values were divided by 6.53 to correct for inflation (U.S. Bureau of the Census 1997).

Community size, in the Star survey, was based on respondent self-report, measured in terms of five categories: (5) metropolitan district over 1,000,000; (4) metropolitan district under 1,000,000; (3) cities of 2,500 to 50,000; (2) towns under 2,500; and (1) farm. In the GSS, community size was based on Census data for respondents' place of residence and was measured in terms of ten categories. Six categories are for places within Standard Metropolitan Statistical Areas (SMSAs): (10) central cities over 250,000; (9) their suburbs; (8) their unincorporated areas; (7) central cities between 50,000 and 249,999; (6) their suburbs; and (5) their unincorporated areas. The other four categories are for places outside SMSAs: (4) cities between 10,000 and 49,999; (3) towns and villages between 2,500 and 9,999; (2) unincorporated areas between 1,000 and 2,499; and (1) open country within larger civil divisions. For analyses involving both time points, we created an additional variable: (3) large metropolitan district (comprising Star categories 4 and 5 and GSS categories 5 through 10); (2) small city/town (Star category 3 and GSS categories 3 and 4); and (1) rural area (Star categories 1 and 2 and GSS categories 1 and 2).

The Star survey categorized *race* as white or non-white, and we used these categories for the GSS as well.

Table 1 reports sociodemographic characteristics for both samples as well as the 1950 and 1990 Censuses. First, comparing the Star and GSS samples, several differences should be noted. Mean age was slightly lower in 1996 (partly because the GSS included a small number of 18 to 20 year olds whom Star excluded), and there was a somewhat higher proportion of women in 1996. Larger differences are observed for race, educational attainment, family income, and community size. The percentage of non-white respondents rose from 10.7 in 1950 to 18.1 in 1996. Most striking is the increase in levels of formal education—in 1950, only 37 percent of the sample had a high

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TABLE 1. Sociodemographic Characteristics of the Star and GSS Samples and United States Censuses for 1950 and 1990

	Star (N = 352) (1950)		Census (1950)	GSS (N = 658) (1996)		Census (1990)
	N	%	%	N	%	%
Gender						
Female	170	49.0	50.3	370	56.2	51.0
Male	177	51.0		288	43.8	
Race/ethnicity						
White	310	89.3	89.5	539	81.9	79.9
Non-white	37	10.7		119	18.1	
Education						
Less than high school	218	63.0	64.0	97	14.7	24.8
High school	64	18.5		342	52.0	
Some college	34	9.8		45	6.8	
College	30	8.7		174	26.4	
Family income						
Less than $1,000	44	12.9		5	0.8	
$1,000–2,999	135	39.8		5	0.8	
$3,000–4,999	119	35.1		12	2.0	
$5,000–9,999	34	10.0		46	7.8	
$10,000 or over	7	2.1				
$10,000–29,999				171	28.9	
$30,000–49,999				156	26.5	
$50,000–74,999				120	20.3	
$75,000 or over				76	12.9	
Median Income (Adjusted to 1950 dollars)	$2,500		$3,073	$37,502 $5,743		$36,095[a]
Community size						
Large metropolitan district	185	53.3[b]		515	78.3	
Small city or town	52	15.0		83	12.6	
Rural area	110	31.7		60	9.1	
Age						
25 to 54[c]	227	73.7	71.0	430	72.9	68.2
55 to 64	40	13.0	15.1	61	10.3	13.6
65+	41	13.3	13.9	99	16.8	18.2
Mean Age	44.9			44.3		

[a]Adjusted to 1996 dollars using the Consumer Price Index.
[b]For the Star survey, community size is based on self-reported size of place; for the GSS, it is based on census classifications. No census comparisons are given.
[c]Age distributions among persons 25 years of age or older.

school diploma, as compared to 85.3 percent in 1996. Similarly, the percentage of respondents who had graduated from college rose from 8.7 in 1950 to 26.4 in 1996. Median income rose from $2,500 to $37,502. Even after adjusting for inflation, median real income more than doubled—to $5,743—between 1950 and 1996. The size of the communities in which respondents lived also increased substantially, with the proportion of respondents living in large metropolitan districts increasing from just over half in 1950 to more than three-quarters in 1996, and the percentage of respondents living in rural areas decreasing from over 30 percent to less than ten percent.

Comparing the characteristics of the survey respondents with data from the corresponding Census, it can be seen that both surveys represented the U.S. population at the time of survey reasonably well. The correspondence is particularly impressive for the Star survey, with the NORC sample and Census including nearly identical percentages of women, whites, and persons with less than a high school education. The largest discrepancy is for family income, with a median value of $2,500 for Star and $3,073 for the Census. Given the scarcity of surviving documentation of the Star sampling procedures and the fact that the sampling method included a combination of probability and quota sampling, the overall correspondence of the Star survey to Census data is par-

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ticularly reassuring and provides clear evidence of the high quality of the sample. Whereas the Star survey was conducted in the same year as the Census, the 1996 GSS was conducted six years after the nearest Census, so that the correspondence between the latter two cannot be expected to be as close. Nevertheless, the GSS sample characteristics are reasonably consistent with those of the Census. The largest discrepancies are for gender and educational attainment. Women are overrepresented (56.2% in the GSS vs. 51% in the Census), and those with less education are underrepresented (14.7% in the GSS vs. 24.8% in the Census have less than a high school education). While these discrepancies might in part reflect the six-year difference between the administration of the Census and the GSS, women and people with higher socioeconomic status are often overrepresented in contemporary social surveys. Both surveys somewhat overrepresent people between the age of 25 and 54, relative to older people.

All of our core results will be adjusted for sociodemographic characteristics, and interactions between year of interview and each characteristic will be assessed.

RESULTS

Changes in Definitions of Mental Illness

Our first question is whether public conceptions of mental illness have broadened to include a greater proportion of non-psychotic syndromes and problems. Table 2 reports the frequency with which each syndrome was represented in descriptions of mental illness in 1950 and 1996. Because up to three categories were coded per respondent, percentages in a given year sum to more than 100 percent.

Table 2 indicates that the percentage of respondents who included behavior indicative of *psychosis* in their description of a mentally ill person did decrease—from 40.7 in 1950 to 34.9 in 1996. This decrease is not quite significant at the .05 level. Analyzing these results slightly differently (not shown in Table 2), we find that the percentage of respondents whose descriptions are limited exclusively to *psychosis* dropped from 25.5 in 1950 to 19.6 in 1996 ($p < .05$) and that the percentage of all the syndromes mentioned (allowing for multiple mentions) that referred to *psychosis* decreased from 37.8 in 1950 to 30.4 in 1996 ($p < .01$).[6] The percentage of respondents whose descriptions include reference to *anxiety/mood problems* also decreased—from 48.7 percent in 1950 to 34.3 percent in 1996 ($p < .001$). By contrast, descriptions that included behavior indicative of *social deviance*, *mental deficiency/cognitive impairment,* and *other non-psychotic* syndromes all increased substantially. The percentage of respondents referring to *social deviance* increased from 7.1 percent to 15.5 percent ($p < .001$). References to *mental deficiency/cognitive impairment* increased from 6.5 percent to 13.8 percent ($p < .001$), and references to *other non-psychotic* problems increased from 7.1 percent to 20.1 percent ($p < .001$).

Because of the large increases in the potentially heterogeneous categories of *mental deficiency/cognitive impairment, social deviance,* and *other non-psychotic* syndromes, it is of interest to know what specific symptoms and manifestations may be accounting for those increases. We cannot answer this question precisely because, for many respondents, there are multiple symptom codes and multiple syndrome codes, and we cannot say with certainty which symptoms led the coders to enter which syndrome codes. For example, if a particular response was coded with syndromes of *mental deficiency/cognitive impairment* and *other*

TABLE 2. Diagnostic Categories with Which Respondents' Descriptions of Mental Illness Corresponded

	Star 1950 (N = 337)	GSS 1996 (N = 653)
Psychosis	40.7%	34.9%+
Anxiety/depression	48.7%	34.3%***
Social deviance	7.1%	15.5%***
Mental deficiency/cognitive impairment	6.5%	13.8%***
Other non-psychotic	7.1%	20.1%***

+ $p < .10$; *** $p < .001$ (two-tailed tests)

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non-psychotic problems and a symptom of *functional impairment,* we cannot be certain whether the functional impairment contributed to the *mental deficiency* code, the *other non-psychotic* code, or both. What we were able to do is examine the types of symptoms that increased in frequency among respondents whose answers were coded as indicating these three syndromes. For *mental deficiency/cognitive impairment,* the largest increase was for a symptom code that seems clearly indicative of mental retardation: Among 1950 responses that were coded as indicating a syndrome of *mental deficiency/cognitive impairment,* symptoms of *intellectual retardation/lack of comprehension* were mentioned by eight people (2.4% of the total sample); this number rose to 51 people (8.3% of the total sample) in 1996. Also showing sizable increases were symptoms of *incompetence* and *functional impairment.* Among respondents with a syndrome code of *mental deficiency/cognitive impairment,* each of these symptoms was mentioned by one person (less than 1% of the total sample) in 1950 and 23 people (3.7%) in 1996.

The increases in *social deviance* and *other non-psychotic* syndromes seem to be largely accounted for by symptoms/manifestations whose correspondence with psychiatric diagnostic categories is ambiguous. Among respondents with syndrome codes of *social deviance*, the symptom/manifestation that increased the most was *socially deviant behavior* (increasing from 2.1% of the total sample in 1950 to 8.8% in 1996), followed by *disordered, abnormal, unspecified* (increasing from 2.7% to 6%), and *incompetent* (increasing from less than 1% to 2.8%). For *other non-psychotic* syndromes, the symptoms/manifestations that increased the most were *irrational* (increasing from 0 to 5.2%) and *disordered, abnormal, unspecified* (increasing from 2.7% to 8.1%), followed by *impaired judgment* (increasing from 0 to 3.4%) and *functional impairment* (increasing from 0 to 2.9%).

To summarize the findings relating to our first question: Public definitions of mental illness have indeed broadened beyond psychosis to some degree. It is not clear to what extent this indicates an increased correspondence between public and psychiatric conceptions of mental illness or the influence of psychiatric definitions on public ones. On the one hand, a good deal of the change is toward descriptions that do not correspond directly to specific psychiatric diagnostic categories (e.g., *social deviance* or *impaired judgment*). On the other hand, the greater breadth per se of the public's current image of mental illness is more consistent with traditionally broader psychiatric definitions and is also consistent with the general thrust of changes to the DSM over the years, which has seen a proliferation of increasingly diverse disorders.

Changes in Perceptions of Dangerousness and Other Frightening Characteristics

Our second question is whether perceptions of dangerousness and related characteristics like unpredictability and instability have decreased. Table 3 reports three types of data relevant to this question: symptom/manifestation codes indicating *violent* behavior or tendencies; symptom/manifestation codes indicating other potentially frightening characteristics (*extreme or excessive*, *unstable*, *unpredictable*, *uncontrolled*, or *irrational*); and syndrome/behavior category codes indicating *violent psychosis*. The table shows that each of these indicators of perceived dangerousness shows not a decrease but a significant increase over the period under study. The percentage of

TABLE 3. Perceptions of Violence and other Frightening Characteristics

	Star 1950	GSS 1996
Percent of respondents mentioning violent symptoms/manifestations	7.2% (N = 335)	12.1%* (N = 622)
Mean number of mentions of other frightening characteristics (extreme/excessive, unstable, unpredictable, uncontrolled, irrational)	.23 (N = 335)	.31* (N = 622)
Percent of respondents whose descriptions were classified as "violent psychosis"	6.8% (N = 337)	12.4%** (N = 653)

*$p < .05$; ** $p < .01$ (two-tailed tests)

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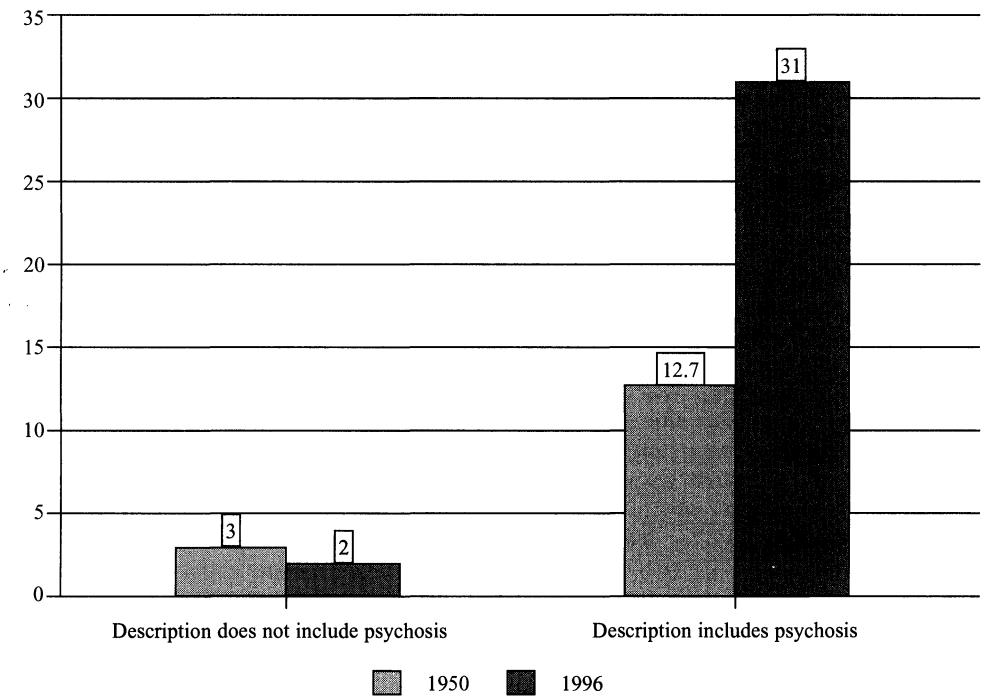
respondents mentioning *violent* behavior or tendencies increased from 7.2 percent in 1950 to 12.1 percent in 1996 ($p < .05$),[7] while the mean number of mentions of other frightening behaviors increased from .23 in 1950 to .31 in 1996 ($p < .05$). The percentage of responses indicating *violent psychosis* increased from 6.8 percent in 1950 to 12.4 percent in 1996 ($p < .01$).[8]

Relation Between Definitions of Mental Illness and Perceptions of Dangerousness

Our third question is whether people who define mental illness more broadly (i.e., include non-psychotic conditions) have fewer negative stereotypes of mental illness than do those who define it more narrowly and whether that association has changed over the period under study. The fact that definitions have broadened at the same time negative stereotypes have increased suggests that the association between the two must have changed. This is confirmed in Figure 1, which contains two important findings. First, for both time periods, those who describe mental illness in terms of psychosis are more likely to include violence in their descriptions. Second, this association between descriptions of psychosis and mentions of dangerousness increased substantially over the period under study. Among respondents who did not mention psychosis in their description of a mentally ill person, the percentage who mentioned violence decreased from 3 percent in 1950 to 2 percent in 1996. However, among those whose descriptions are classified as indicating psychosis, the percentage mentioning violence more than doubled, increasing from 12.7 percent in 1950 to 31 percent in 1996. In a logistic regression predicting mentions of violence from mentions of psychosis, year of interview, and their interaction, the interaction term was statistically significant ($p < .05$). Thus, the unexpected increase in perceptions of violence is confined to those who think of mental illness in terms of psychosis.[9]

Given these results, it is clear that broadened definitions of mental illness over time cannot

FIGURE 1. Percent of Respondents Whose Description of Mental Illness Includes Perceptions of Violence



Note: **The interaction presented in the Figure (descriptions of psychosis by year of interview) was tested in a logistic regression and was found to be significant at the .05 level (two-tailed test).**

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mediate a reduction in negative stereotypes, because there was no reduction. This was confirmed by logistic regressions predicting mention of violence from year of survey, before and after controlling for mention of psychosis. The odds that a respondent in 1996 would mention violence in describing a mentally ill person were 1.8 times the odds that a 1950 respondent would mention violence. When mentions of psychosis were entered into the equation, the adjusted odds ratio increased to 2.3. Thus, without the broadening of definitions of mental illness that occurred between 1950 and 1996, it appears that perceptions of violence would have increased even more than they did.

Sociodemographic Characteristics, Definitions of Mental Illness, and Perceptions of Dangerousness

Finally, we assess the possible contribution of demographic transformations to the changes in mental-illness conceptions we have reported. We first examined the bivariate associations, separately for the two surveys, of mentions of psychosis and violence with education, family income, age, community size (using t-tests), race, and gender (using chi-square tests).

In the Star survey, none of the sociodemographic factors was significantly related to mentions of psychosis or violence at the .05 level. Less educated ($p = .064$) and non-white ($p = .076$) respondents mentioned psychosis marginally more often. Lower family income was marginally related to mentions of violence ($p = .056$).

In the GSS, education ($p < .05$) and race ($p < .01$) were significantly related to mentions of psychosis. Mean education was 1.42 for those who mentioned psychosis and 1.61 for those who did not (1 = high school degree; 2 = some college). Among non-white respondents, 45.3 percent mentioned psychosis, compared to 32.6 percent among whites. Family income was also marginally related ($p = .102$) to mentions of psychosis, with lower incomes among those who mentioned psychosis. None of the sociodemographic variables was significantly related to mentions of violence at the .05 level, although non-whites were somewhat more likely to mention violence ($p = .078$).

Although few of these associations were statistically significant, the pattern of findings is consistent with previous results and supports the idea that sociodemographic characteristics play some role in shaping conceptions and attitudes. Because the U.S. population has changed substantially since 1950 with regard to income, educational attainment, racial composition, and urbanicity, and because women are somewhat more prevalent in the 1996 sample, one or more of these variables may have played a role in the changes observed in conceptions and attitudes. To evaluate this question, we performed a series of logistic regressions. Mentions of psychosis and violence were first regressed on year of interview only. We then added race and gender, educational attainment and family income, and community size to the equations in three successive blocks. Next we entered terms for interactions between year of interview and each of the sociodemographic variables. Recall that these analyses employ variables for education, family income, and community size that synthesize the Star and GSS coding schemes.

Finally, to further evaluate the increased association between perceptions of pyschosis and of violence (first presented in Figure 1) while controlling for sociodemographic factors and changes, we add two additional steps to the series of regressions predicting mentions of violence. After the sociodemographic variables, we added mentions of violence and then a term for the interaction of mentions of psychosis and year of interview.

As Table 4 shows, there was a marginal ($p < .10$) decrease in mentions of psychosis between 1950 and 1996. The magnitude of this association was increased slightly by the inclusion of race and gender and then more than halved and reduced to non-significance by the inclusion of education and family income. The addition of community size to the equation had little impact on the coefficient for year of interview. Race was the only sociodemographic variable that was significantly associated with mentions of psychosis in these equations, with non-white respondents mentioning psychosis significantly more frequently than whites ($p < .05$ in the final model). When each sociodemographic variable was entered alone with year of interview (not shown in Table 4), higher educational attainment and white race were significantly associated with fewer mentions of psychosis ($p < .01$), family income was marginally associated with fewer mentions ($p <$

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TABLE 4. Logistic Regressions Predicting Definitions of Mental Illness (i.e., Log-odds that Description Refers to Psychosis) from Year of Interview and Sociodemographic Factors, N = 904

	1	2	3	4
Year	–.237+	–.265+	–.107	–.101
(0 = 1950; 1 = 1996)	(.144)	(.146)	(.164)	(.168)
Race/ethnicity		–.498**	–.433*	–.435*
(0 = non-white; 1 = white)		(.188)	(.192)	(.193)
Gender		–.136	–.156	–.156
(0 = male; (1 = female)		(.140)	(.142)	(.142)
Family income			–.017	–.017
			(.021)	(.021)
Education			–.119	–.118
			(.076)	(.076)
Community size				–.017
				(.097)
Chi-square	2.69+	10.32*	15.18**	15.21*
df	1	3	5	6

+$p < .10$; *$p < .05$; **$p < .01$ (two-tailed tests).
Note: Numbers in parentheses are standard errors.

.10), and neither community size nor gender was significantly associated with mentions of psychosis. None of the interactions between year of interview and sociodemographic factors was statistically significant (not shown in tables). In summary, it appears that broadened definitions of mental illness were mediated to some degree by increases in socioeconomic status and that definitions might have broadened even more in the absence of increasing racial diversity. There is no indication that increased urbanization or a greater proportion of women in the GSS sample played a role in the modest broadening of definitions of mental illness between 1950 and 1996, nor is there any indication that the sociodemographic correlates of conceptions of mental illness changed over this time period.

As shown in Table 5, mentions of violence increased significantly between 1950 and 1996 ($p < .05$). The addition of race and gender reduced the size of the coefficient for year of interview somewhat, the subsequent addition of education and family income increased it beyond its original value, and the addition of community size reduced it again slightly. None of these additions, however, changed the statistical significance of the association between year of interview and mentions of violence. Moreover, in the final model, none of the sociodemographic factors was significantly associated with mentions of violence. When each of the sociodemographic variables was entered alone with year of interview (not shown in Table 5), only race was marginally associated ($p < .10$) with mentions of violence, whites mentioning violence less often. None of the interactions between sociodemographics and year of interview was significant (not shown in Table 5 and not included in subsequent steps shown in columns 5 and 6). Thus, unlike the situation for definitions of mental illness, changing demographic profiles did not appear to play a noteworthy role in increased perceptions of violence between 1950 and 1996.

What does play an important role in increasing perceptions of violence is the changing relationship between mentions of psychosis and violence. Columns 5 and 6 confirm that, as indicated graphically in Figure 4 (without controls for sociodemographic factors), mentions of psychosis are significantly associated with mentions of violence ($p < .001$) and that the two are more strongly associated in 1996 than in 1950 ($p < .05$).

DISCUSSION

Researchers in the 1950s painted a bleak picture of public orientations toward mental illness—people defined mental illness in narrow and extreme terms, and attitudes were fearful and rejecting. Several factors, including increased utilization of mental health services, greater disclosure of mental health problems by public figures, and empirical findings

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TABLE 5. Logistic Regressions Predicting Perceptions of Violence (i.e., Log-odds that Description Refers to Violence) from Year of Interview and Sociodemographic Factors, N = 866

	1	2	3	4	5	6
Year	.616*	.580*	.671*	.660*	.785*	−.392
(0 = 1950; 1 = 1996)	(.262)	(.264)	(.288)	(.296)	(.310)	(.567)
Race/ethnicity		−.534+	−.483+	−.479+	−.280	−.285
(0 = non-white; 1 = white)		(.278)	(.284)	(.285)	(.304)	(.308)
Gender		−.094	−.122	−.121	−.045	−.039
(0 = male; 1 = female)		(.230)	(.233)	(.233)	(.246)	(.248)
Family income			−.027	−.027	−.017	−.015
			(.033)	(.033)	(.035)	(.036)
Education			−.006	−.008	−.037	.027
			(.123)	(.123)	(.132)	(.133)
Community size				.028	.047	.055
				(.169)	(.179)	(.179)
Mentions psychosis					2.480***	1.430**
					(.305)	(.499)
Mentions psychosis x year						1.490*
						(.634)
Chi-square	6.01*	9.54*	10.33+	10.35	102.99***	108.19***
df	1	3	5	6	7	8

+P < .10; * P < .05; ** P <.01; *** P < .001 (two-tailed tests)
Note: Numbers in parentheses are standard errors.

regarding public conceptions and attitudes, suggest that this situation may have changed significantly, but no study has directly compared public beliefs and attitudes over this time period. We were able to make such a comparison by analyzing responses to an identical question asked in the same manner of nationally representative samples in 1950 (Shirley Star's study, "Popular Thinking in the Field of Mental Health") and 1996 (the General Social Survey's Mental Health Module).

Our results suggest that the public's conceptualization of mental illness has broadened somewhat such that psychosis dominated people's descriptions of mental illness to a lesser extent in 1996 than in 1950. It is not clear to what extent this broadening reflects a closer alignment with psychiatric conceptions: The percentage of respondents mentioning anxiety or mood problems (very common disorders according to epidemiological data; Kessler et al. 1994) decreased, and there was a large increase in the percentage of respondents who referred to non-specific social deviance and to behaviors or problems that do not fit any of the diagnostic-related syndrome groupings ("other non-psychotic"). Yet we did find that the traditional stereotype of psychosis played a smaller part in respondents' descriptions of mental illness in 1996 than it did in 1950. The findings thus support the idea that, overall, mental illness is now conceived of as something less alien and less extreme than it was in 1950.

However, the significant increase in mentions of dangerousness in respondents' descriptions of mental illness—nearly doubling between 1950 and 1996—is difficult to fit into a picture of normalization or increased acceptability of mental illness. A potentially important clue to this incongruity is found in the fact that mentions of dangerousness only increased among respondents who include psychosis in their descriptions of mental illness. Americans are now less likely to describe psychosis when asked about mental illness, but if they do they are much more likely to include dangerousness as part of their description. This change was not attributable to changes in the sociodemographic composition of the U.S. population, nor were mentions of violence limited to, or even significantly more frequent in, any particular sociodemographic groups.

Before discussing the implications of these results, we would like to consider some strengths and limitations of our analysis. Several strengths in the data give us confidence in the validity of the findings. First, the administration and analysis of the two surveys were very comparable: both surveys used a national probability sample and face-to-face interviews of about the same length; the same question was repeated verbatim at both time points; the same coding scheme was used by the same coders. The use of an open-ended question potentially has both advantages and disadvantages. Because it asks people to speak

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"off the cuff," we believe this type of question has the potential to circumvent, to some degree, the social desirability bias that has been shown to influence expressed attitudes toward mentally ill people when measured with fixed-response survey items (Link and Cullen 1983). On the other hand, the analysis of this type of question relies on raters' judgments, which raises questions of reliability and validity. However, the inter-rater reliability of the rating categories we examined was high. Moreover, evidence for construct validity is offered by the fact that perceptions of violence were more common among those who defined mental illness in terms of psychosis and by the pattern of (modest) associations of sociodemographic characteristics with definitions of mental illness and perceptions of violence.

One methodological difference between the two surveys is a potential source of bias. The question analyzed here was preceded in the GSS study by a Star-type vignette describing either schizophrenia, major depression, alcohol dependence, cocaine dependence, or a person with non-clinical problems and worries. The vignette was followed by a series of questions including the likelihood that the problem described is a mental illness and the likelihood that the person described might be dangerous. In the Star survey, our question was not preceded by any other questions about mental illness. Thus, there is the possibility that the vignette influenced the type of syndromes described by respondents and/or their tendency to mention violence. However, there are several indications that the preceding vignettes were not an important source of bias. Regarding the types of syndromes mentioned, the diagnosis assigned in the vignette was not significantly associated with the syndromes described by respondents in the open-ended question, as assessed with a chi-square test. Notably, even though roughly 40 percent of respondents received a vignette describing substance dependence, only six of the entire sample mentioned alcohol or drug problems in their description of mental illness. Nor did the particular vignette respondents received significantly influence their tendency to mention violence. A further concern is that asking whether the vignette subject might be dangerous could increase the tendency to mention violence in response to the open-ended question for all the 1996 respondents. However, the fact that the increase in mentions of violence was restricted to respondents who described mental illness in terms of psychosis argues against such a bias.

Confounding could be a problem if it were something about the type of person who describes mental illness in terms of psychosis that leads to mentions of violence rather than the psychosis concept itself. Arguing against this possibility, however, is the fact that perceptions of dangerousness were not significantly related to any of the sociodemographic variables at either time point. Also, in the vignette experiment component of the 1996 survey, in which descriptions of different psychiatric disorders were randomly assigned to respondents (eliminating the possibility of confounding), the person described with symptoms of schizophrenia was perceived as nearly twice as likely (61% vs. 33%) to be violent as the person with major depressive disorder.

One notable limitation is that we have only one type of measure of negative perceptions and stigma, namely spontaneously mentioned perceptions of dangerousness and other frightening characteristics. Although these are core features of the stigma of mental illness (Jones et al. 1984), and although perceived dangerousness is strongly related to social distance from persons with mental illness (Link et al. 1987; Link et al. 1999), it would be very desirable to test the generalizability of these findings to other measures of stigma, such as social distance or direct queries (as opposed to spontaneous mentions) concerning dangerousness.

Overall, we believe evidence for the validity of the present findings is reasonably strong, and we believe that they represent the best available data pertaining to historical changes in public definitions and conceptions of mental illness and in negative stereotypes and stigma. We now turn to a discussion of the implications of the results.

Our finding of increased perceptions of dangerousness was unexpected and appears at odds with other indications of decreased stigma. How can these facts be reconciled? One possibility is that acceptance of mental illness has not increased. Increased utilization of mental health services may be due to other factors, such as broadened definitions of mental illness or greater availability or affordability of treatment. Disclosure of mental illness by public figures may reflect an effort to destigmatize mental illness rather than an indication that that goal has been realized. Rather than reflect-

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ing true attitude change, apparent trends in the findings of empirical studies may reflect either methodological differences between studies or the expression of changing socially appropriate attitudes (Rabkin 1974).

A second possibility is that other dimensions of stigma have abated even though perceptions of dangerousness have increased. This seems unlikely, however, given the strong association between perceived dangerousness and social distance (Link et al. 1987, 1999).

A third possibility is that gains have indeed been made in terms of normalization and public acceptance of less severe mental illnesses but that these gains do not generalize to people with psychosis. Such a possibility is consistent with the dramatic distinction, in our results, between descriptions of psychotic and non-psychotic syndromes and their divergence over time. Mentions of dangerousness more than doubled between 1950 and 1996 in descriptions involving psychosis, whereas mentions of dangerousness decreased for non-psychotic syndromes. Perhaps it is the case that less severe problems—depression, anxiety, problems coping, problems functioning—are increasingly seen as something that is part of life that can happen to anyone, as something that one can be somewhat open about, while psychosis remains alien, stigmatized, something to be concealed when it occurs in oneself or one's family (Link et al. 1989; Phelan, Bromet and Link 1998), and something to be feared in others. Perhaps people with less severe forms of mental disorder do increasingly belong to "us," while people with psychosis remain "them."

If we re-examine the indicators of decreased stigma referred to earlier in light of this distinction between psychotic and non-psychotic disorders, we see that those indicators reflect the less severe, non-psychotic illnesses. Increased utilization of mental health services is primarily for non-psychotic problems. Notable instances of public disclosure have been for mood rather than schizophrenia-spectrum disorders. Research results suggesting a decrease in social distance have generally asked respondents about "mentally ill" people, a label that is apparently increasingly applied to those with non-psychotic illnesses (Crocetti et al. 1974; Rabkin 1974). These facts are consistent with a scenario in which there has been a real move toward greater acceptance and less negative views of mental illness, but a move that has left behind the most seriously ill—those with psychosis—who are viewed with greater fear than they were half a century ago.

If it is true that some mental illnesses, but not those involving psychosis, have gained acceptance in our society, this is not in itself a bad thing. Overall, it represents progress, because it improves the lives of people with less serious disorders. The danger is in obscuring stark differences in perceptions of the two tiers of mental illness, attitudes which appear to have had very different lives and trajectories over the past half century. Thus, if we look at changing orientations toward less severe mental illnesses, we may falsely conclude that attitudes toward severely mentally ill people have also improved. Results of research on attitudes toward a general concept of "mental illness" may also obscure this distinction.

While it remains unclear whether the social climate for people with non-psychotic mental illnesses has improved, what our results show clearly is that the climate has not improved for people with psychosis. Perceptions that such people are dangerous increased nearly two and a half times since 1950 to a point that, in 1996, nearly one-third of respondents spontaneously volunteered the idea that psychotic persons may be violent. The stereotype of the violent psychotic person has become stronger in our society than it was in the time when researchers first pointed out and lamented the existence of such negative stereotypes. This is a serious set-back for people with psychosis. The practical importance of this result can be underscored by noting Link et alia's (1987, 1999) finding that perceptions of dangerousness are a key factor in determining the degree of social distance the public desires from a person with a mental illness. Thus, increased perceptions of dangerousness are likely to have a very real impact on the personal, social, and economic opportunities of people who have or who have previously experienced psychosis (Link et al. 1989).

An obvious question is why this negative stereotype has not decreased or remained steady, but has actually significantly increased. Two particularly salient possibilities are the effects of the media and of de-institutionalization. It has been clearly documented that negative stereotypes (including dangerousness) of people with mental illnesses abound in the media (Wahl 1995; Signorelli 1989; Steadman and Cocozza 1978). However, in the GSS (the

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only survey for which these data were available), mentions of dangerousness were not significantly related to the frequency of reading the newspaper or of watching television. Two caveats are important here: First, each media exposure variable was measured with a single question, and the reliability of the measures and the particulars of the media exposure are unknown; second, to attempt to assess the effects of changes in exposure to negative media messages over time by looking at variations in media exposure at the present time may be an instance of a "type III error"—getting the right answer to the wrong question (Schwartz and Carpenter 1999). In particular, television was not part of our culture in 1950, and now its influence is ubiquitous. Current variations in television viewing may not be able to mimic that massive cultural change.

De-institutionalization is a second potential reason for increased perceptions that mentally ill people, particularly those with psychosis, are dangerous. One consequence of de-institutionalization is that exposure to mentally ill people who often experience psychosis and often appear disheveled and behave in bizarre and incomprehensible ways has become a salient aspect of urban life. A positive association between community size and perceived dangerousness—particularly in the 1996 sample—would provide indirect evidence for the idea that increased perceptions of dangerousness result from greater exposure to mentally ill people who are perceived as frightening. Our data indicate, however, that community size was unrelated to perceptions of dangerousness at both time points. Using more direct data on contact and perceptions of dangerousness from a nationwide survey of 1,507 Americans conducted by Link et al. (1994), we examined the possibility that members of the public who report more impersonal contact or negative contact with mentally ill people (measured with two single items) would regard them as more dangerous (measured with a seven-item scale; alpha = .77). Contrary to this reasoning, respondents who reported frequently seeing people in public who seemed to be mentally ill or seeing homeless people making gestures or talking to themselves were significantly less likely to perceive mentally ill persons as dangerous ($p < .001$ and $p < .05$, respectively). Thus, the very limited data available to us provided no support for the influence of de-institutionalization on increased perceptions that mentally ill people are dangerous. Ironically, there is some evidence that the "dangerous to self or others" criterion for involuntary commitment may have played a role in strengthening the stereotype of the dangerous psychotic (Phelan and Link 1998). We emphasize again, however, that these analyses are far from decisive and that it remains a challenge for future research to explain why the stereotype of a dangerous psychotic person has become stronger today than it was in 1950. For now, it is important that we recognize that the stereotype has become stronger.

Despite the possible increased acceptance of the less serious mental illnesses, which may indeed increasingly be viewed as "illnesses like any other," our findings suggest that fear and stigma directed at the most serious mental illnesses are, in some very important respects, stronger than they were 46 years ago. While the term "mental illness" is now less likely to bring to the minds of Americans the picture of a person with psychosis, something has occurred in our culture over the past half century that has increased the connection between psychosis and violence in the public mind. Whatever that something is, it has had this effect despite our best efforts to achieve exactly the opposite result. Research is required to identify the precise source of these unfortunate stereotypes, and advocacy is required to change them. In the absence of such efforts, the lives of people with the most serious mental illnesses will continue to be complicated by the injurious effects of stigma and rejection.

NOTES

1. The "Star vignettes" describe hypothetical individuals meeting criteria for various psychiatric disorders, as defined by the psychiatric profession, and ask respondents questions about the individual, including the likelihood that the individual has a "mental illness." Versions of these vignettes, adapted to reflect current psychiatric definitions, were also included in the 1996 GSS Mental Health Module (see Link et al. 1999 and Pescosolido et al. 1999 for analyses using the vignettes). However, they were not well suited to track changes in cultural conceptions over time because the vignettes were not repeated verbatim.
2. By referring to non-psychotic disorders as

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less severe or serious, we do not mean that they are not serious or that they are necessarily less distressing to the ill person than is psychosis. Rather, we refer to what we believe are public perceptions that psychosis is a more extreme deviation from normal psychological functioning.

3. This meant that there were no callbacks for potential respondents who were not at home or had refused on the first call at a dwelling unit. However, refusal rates in the early years of survey research were substantially lower than they are now; consequently, the ultimate quality of the sample is probably as good or better than many samples used by social scientists today. Evidence for the representativeness of the Star sample is provided in Table 1.
4. The GSS included those 18 to 20 years old, whereas Star only sampled persons 21 or older. In our sample, there were 22 (3.3%) GSS respondents between the ages of 18 and 20, whom we have included in the results reported here. However, all analyses were re-run excluding those 22 respondents, and those results do not differ in any notable respects from those we report.
5. Most of the missing or non-usable responses in the GSS were not refusals to answer, but rather reflect the respondent's inability to answer the question (e.g., "I don't know—I don't know anyone like that") or a response (e.g., "hopefully they're getting help") that was not codable for syndrome/problem category, for symptoms/manifestations, or for either. For syndrome/problem category, 51 percent of the non-usable responses were of this non-codable type, and for symptoms/manifestations, 69 percent were of this type. Because of the substantial proportion of missing data for these core variables (7.8% for syndrome and 12.1% for symptoms), we attempted to determine whether some kinds of respondents were less likely to provide usable data than others. Specifically, for each variable we logistically regressed a dichotomous variable (usable vs. missing data) on gender, age, race, education, family income, and community size. In both cases, all associations between respondent characteristics and usable responses were non-significant and extremely weak. Thus, at least in terms of sociodemographic characteristics, we find no evidence that willingness or ability to describe "mental illness" (and consequently inclusion in our analyses) is systematically related to respondent characteristics.
6. In subsequent analyses presented here, we assess conceptions of mental illness in terms of whether the respondent describes psychosis rather than whether they describe only psychosis. However, all analyses were run with both measures, and the two sets of results do not differ in any important respects.
7. If suicidal tendencies are omitted from the analysis, the percentage increases from 5.7 in 1950 to 9.3 in 1996 ($p < .05$).
8. As noted previously, up to three diagnostic categories and up to three symptoms/manifestations could be coded for each respondent. In the GSS, somewhat fewer symptoms/manifestations were mentioned per respondent (mean = 2.09) than in the Star survey (mean = 2.54), and slightly more diagnostic categories were coded per respondent (mean = 1.48 for GSS vs. 1.37 for Star). Thus, if we compute the percentage of all symptoms/manifestations mentioned in a given year that indicate violent or frightening symptoms, rather than the percentage of respondents who mention such symptoms, the increase in mentions of violent and frightening symptoms between 1950 and 1996 is even greater than reported in Table 3. For descriptions of violent psychoses, this same kind of adjustment results in a slightly smaller increase between 1950 and 1996. However, this increase in the percentage of diagnoses coded that indicate violent psychoses is still significant at the .05 probability level.
9. We were concerned that mentions of violence might be more frequent among respondents who describe mental illness in terms of deviant behavior (a category which also includes antisocial behavior and substance abuse), that many respondents might mention both psychosis and socially deviant behavior, and that these relationships might at least partially account for the association between mentions of psychosis and mentions of violence. However, mentions of violence were not elevated among respondents whose descriptions were categorized as indicating socially deviant behavior. Moreover, there was no tendency for the categories of psychosis and antisocial/

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deviant behavior to co-occur. Rather, respondents whose answers were categorized as indicating psychosis were less likely to be categorized as antisocial/deviant.

REFERENCES

Abrahamson, Mark and Valerie J. Carter. 1986. "Tolerance, Urbanism and Region." *American Sociological Review* 51:287–94.

American Psychiatric Association. 1952. *Diagnostic and Statistical Manual of Mental Disorders.* Washington, DC. American Psychiatric Association.

———. 1994. *Diagnostic and Statistical Manual of Mental Disorders.* 4th ed. Washington, DC. American Psychiatric Association.

Belson, W. 1957. "The Ideas of the Television Public about Mental Illness." *Mental Health* 16:95.

Bentz, W. Kenneth, J. W. Edgerton, and M. Kherlopian. 1969. "Perceptions of Mental Illness among People in a Rural Area." *Mental Hygiene* 53:459–65.

Bentz, W. Kenneth, J. W. Edgerton, and F. T. Miller. 1969. "Perceptions of Mental Illness among Public School Teachers." *Sociology of Education* 42:400–6.

Blizzard, P. J. 1970. "The Social Reflection of the Alcoholic and the Mentally Ill in New Zealand." *Social Science and Medicine* 4:513–26.

Brockman, Joan and Carl D'arcy. 1978. "Correlates of Attitudinal Social Distance Toward the Mentally Ill: A Review and Re-survey." *Social Psychiatry* 13:69–77.

Cohen, Jacob. 1960. "A Coefficient of Agreement for Nominal Scales." *Educational and Psychological Measurement* 20:37–46.

Crocetti, Guido W. and P. V. Lemkau. 1963. "Public Opinion of Psychiatric Home Care in an Urban Area." *American Journal of Public Health* 53:409–14.

Crocetti, Guido W., H. R. Spiro, and I. Siassi. 1974. *Contemporary Attitudes Toward Mental Illness.* Pittsburgh, PA: University of Pittsburgh Press.

Cumming, Elaine and John Cumming. 1957. *Closed Ranks.* Cambridge, MA: Harvard University Press.

Davis, James Allan and Tom W. Smith: 1996. *General Social Surveys, 1972–1996.* [MRDF]. Chicago: National Opinion Research Center [producer] Storrs, CT: The Roper Center for Public Opinion Research, University of Connecticut [distributor]

Dohrenwend, B. P. 1966. "Social Status and Psychological Disorder: An Issue of Substance and an Issue of Method." *American Sociological Review* 31:14–34.

Dohrenwend, B. P., V. W. Bernard, and L. C. Kolb. 1962. "The Orientations of Leaders in an Urban Area Toward Problems of Mental Illness." *American Journal of Psychiatry* 118:683–91.

Dohrenwend, B. P. and E. Chin-Shong. 1967. "Social Status and Attitudes Toward Psychological Disorder: The Problem of Tolerance of Deviance." *American Sociological Review* 32:417–33.

Edgerton, W. J. and W. K. Bentz. 1969. "Attitudes and Opinions of Rural People about Mental Illness and Program Services." *American Journal of Public Health* 59:470–77.

Elinson, Jack, E. Padilla, and M. Perkins. 1967. *Public Image of Mental Health Services.* New York: Mental Health Materials Center.

Freeman, Howard E. 1961. "Attitudes toward Mental Illness among Relatives of Former Patients." *American Sociological Review* 26:59–66.

Gove, Walter R. 1982. "Current Status of Labelling Theory." Pp. 273–300 in *Deviance and Mental Illness,* edited by Walter R. Gove. Beverly Hills, CA: Sage Publications.

Jones, Edward E., Amerigo Farina, Albert H. Hastorf, Hazel Markus, Dale T. Miller, and Robert A. Scott. 1984. *Social Stigma: The Psychology of Marked Relationships.* New York: Freeman.

Kessler, Ronald C., K. A. McGonagle, X. Zhao, C. B. Nelson, S. Eshleman, H. U. Wittchen, and Kenneth S. Kendler. 1994. "Lifetime and 12-month Prevalence of DSM-III-R Psychiatric Disorders in the United States: Results from the National Comorbidity Study." *Archives of General Psychiatry* 51:8–19.

Kessler, Ronald C. and X. Zhao. 1999. "Past-year Use of Out-patient Services for Psychiatric Problems in the National Comorbidity Study." *American Journal of Psychiatry* 156:115–23.

Kiecolt, K. Jill. 1988. "Recent Developments in Attitudes and Social Structure." *Annual Review of Sociology* 14:381–403.

Lemkau, P. V. and G. M. Crocetti. 1961. "The Amsterdam Municipal Psychiatric Service: A Psychiatric-sociological Review." *American Journal of Psychiatry* 118:692–700.

Link, Bruce G. and Francis T. Cullen. 1983. "Reconsidering the Social Rejection of Ex-Mental Patients: Levels of Attitudinal Response." *American Journal of Community Psychology* 11:261–73.

Link, Bruce G., Francis T. Cullen, Elmer Struening, Patrick Shrout, and Bruce P. Dohrenwend. 1989. "A Modified Labeling Theory Approach in the Area of the Mental Disorders: An Empirical Assessment." *American Sociological Review* 54:400–23.

Link, Bruce G., Francis T. Cullen, J. Frank, and J. F. Wozniak. 1987. "The Social Rejection of Former Mental Patients: Understanding Why Labels Matter." *American Journal of Sociology* 92:1461–500.

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All use subject to JSTOR Terms and Conditions

Link, Bruce G., Jo C. Phelan, Michaeline Bresnahan, Ann Stueve, and Bernice A. Pescosolido. 1999. "Public Conceptions of Mental Illness: Labels, Causes, Dangerousness and Social Distance." *American Journal of Public Health* 89:1328–33.

Link, Bruce G., Ezra Susser, Ann Stueve, Jo Phelan, Robert Moore, and Elmer Struening. 1994. "Lifetime and Five-year Prevalence of Homelessness in the United States." *American Journal of Public Health* 84:1907–12.

MacLean, U. 1969. "Community Attitudes to Mental Illness in Edinburgh." *British Journal of Preventive and Social Medicine* 23:45–52.

Manderscheid, Ronald W. and M. J. Henderson, eds. 1998. *Mental Health, United States, 1998.* Department of Health and Human Services Publication No. (SMA)99-3285. Washington, DC:Supt. Of Docs., U.S. Govt. Print. Off., 1998.

Meyer, J. K. 1964. "Attitudes toward Mental Illness in a Maryland Community." *Public Health Report* 79:769–72.

Nunnally, Jum C. 1961. *Popular Conceptions of Mental Health: Their Development and Change.* New York: Holt, Rinehart, and Winston.

Olmsted, Donald W. and Katherine Durham. 1976. "Stability of Mental Health Attitudes: A Semantic Differential Study." *Journal of Health and Social Behavior* 17:35–44.

Owen, Carolyn A., Howard C. Eisner, and Thomas R. McFaul. 1981. "A Half Century of Social Distance Research: National Replication of the Bogardus' Studies." *Sociology and Social Research* 66:80–98.

Parra, F. 1985. "Social Tolerance of the Mentally Ill in the Mexican American Community." *International Journal of Social Psychiatry* 31:37–45.

Pescosolido, Bernice A., John Monahan, Bruce G. Link, Ann Stueve and Saeko Kikuzawa. 1999. "The Public's View of the Competence, Dangerousness, and Need for Legal Coercion of Persons with Mental Health Problems." *American Journal of Public Health* 89:1339–45.

Phelan, Jo C., Evelyn J. Bromet and Bruce G. Link. 1998. "Psychiatric Illness and Family Stigma." *Schizophrenia Bulletin* 24:115–26.

Phelan, Jo C. and Bruce G. Link. 1998. "The Growing Belief that People with Mental Illnesses are Violent: The Role of the Dangerous Criterion for Civil Commitment." *Social Psychiatry and Psychiatric Epidemiology* 33:S7–12.

Phelan, Jo, Bruce G. Link, Ann Stueve, and Robert E. Moore. 1995. "Education, Social Liberalism and Economic Conservatism: The Case of Attitudes Toward Homeless People." *American Sociological Review* 60:126–40.

Phillips, Derek L. 1964. "Rejection of the Mentally Ill." *American Sociological Review* 19:679–87.

Purdue University. 1959. "Youth's Attitudes Toward Mental Illness." Division of Educational Referents, Purdue University, Lafayette, IN.

Rabkin, Judith G. 1974. "Public Attitudes Toward Mental Illness: A Review of the Literature." *Schizophrenia Bulletin* 10:9–33.

Regier, Darrel A., William E. Narrow, Donald S. Rae, Ronald W. Manderscheid, Ben A. Locke, and Frederick K. Goodwin. 1993. "The De Facto U.S. Mental and Addictive Disorders Service System." *Archives of General Psychiatry* 50:85–94.

Rootman, A. and P. Lafare. 1965. "Ethnic Community." *Psychiatric Quarterly* 41:211–21.

Schwartz, Sharon and Kenneth M. Carpenter. 1999. "The Right Answer for the Wrong Question: Consequences of Type III Error for Public Health Research." *American Journal of Public Health* 89:1175–80.

Signorelli, Nancy. 1989. "The Stigma of Mental Illness on Television." *Journal of Broadcasting and Electronic Media* 33:325–31.

Star, Shirley A. 1952. "What the Public Thinks about Mental Health and Mental Illness." Chicago: National Opinion Research Center (photocopied).

———. 1955. "The Public's Ideas about Mental Illness." Chicago: National Opinion Research Center. (photocopied).

———. 1957. "The Place of Psychiatry in Popular Thinking." Chicago: National Opinion Research Center. (photocopied).

Steadman, Henry J. and Joseph J. Cocozza. 1978. "Selective Reporting and the Public's Misconceptions of the Criminally Insane." *Public Opinion Quarterly* 41:523–32.

U.S. Bureau of the Census. 1997. *Statistical Abstract of the United States*. Washington, DC: Government Printing Office.

Veroff, Joseph, Richard A. Kulka, and Elizabeth Douvan. 1981. *Mental Health in America: Patterns of Help-seeking from 1957 to 1976.* New York: Basic Books.

Wahl, Otto. 1995. *Media Madness: Public Images of Mental Illness*. New Brunswick, NJ: Rutgers University Press.

Westbrook, M. T., V. Lege, and M. Pennay. 1993. "Attitudes toward Disabilities in a Multicultural Society." *Social Science and Medicine* 36:615–23.

Yarrow, M. R., J. A. Clausen, and P. R. Robbins. 1955. "The Social Meaning of Mental Illness." *Journal of Social Issues* 11:33–48.

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